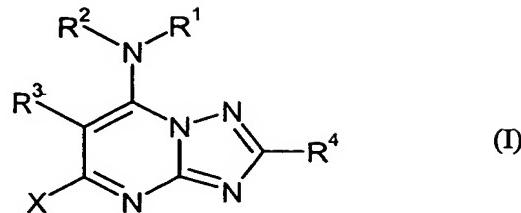


Claims

1. A triazolopyrimidine of the formula



in which

- 5      R<sup>1</sup>    represents H, R<sup>2</sup>, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl or represents optionally substituted heterocyclyl,
- 10     R<sup>2</sup>    represents an organic radical which contains 3 to 13 carbon atoms and one or more silicon atoms and, if appropriate, 1 to 3 identical or different heteroatoms from the group consisting of oxygen, nitrogen and sulfur, and which is unsubstituted or substituted by 1 to 4 identical or different halogens, or
- R<sup>1</sup> and R<sup>2</sup> together with the nitrogen atom to which they are attached represent an optionally substituted heterocyclic ring which contains one or more silicon atoms and/or is substituted by one or more radicals R<sup>2</sup>,
- 15     R<sup>3</sup>    represents optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aralkyl, or optionally substituted amino group, optionally substituted (C<sub>1</sub>-C<sub>8</sub>)-alkoxy, optionally substituted (C<sub>1</sub>-C<sub>8</sub>)-alkylthio, optionally substituted (C<sub>6</sub>-C<sub>10</sub>)-aryloxy, optionally substituted (C<sub>6</sub>-C<sub>10</sub>)-arylthio, optionally substituted heterocyclloxy, optionally substituted C<sub>6</sub>-C<sub>10</sub>)-aryl-(C<sub>1</sub>-C<sub>4</sub>)-alkoxy, optionally substituted heterocyclyl-(C<sub>1</sub>-C<sub>4</sub>)-alkoxy, or optionally substituted heterocyclyl-(C<sub>1</sub>-C<sub>4</sub>)-alkylthio;
- 20     R<sup>4</sup>    represents H, halogen, optionally halogen-substituted alkyl or optionally halogen-substituted cycloalkyl and

X represents halogen, cyano, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted phenyl.

2. The triazolopyrimidine of the formula (I) as claimed in claim 1 where

R<sup>1</sup> represents H, or

5 R<sup>1</sup> represents a radical R<sup>2</sup>, or

R<sup>1</sup> represents alkyl having 1 to 6 carbon atoms which may be mono- to pentasubstituted by identical or different substituents from the group consisting of halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms and cycloalkyl having 3 to 8 carbon atoms, or

10 R<sup>1</sup> represents alkenyl having 2 to 6 carbon atoms which may be mono- to trisubstituted by identical or different substituents from the group consisting of halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms and cycloalkyl having 3 to 8 carbon atoms, or

15 R<sup>1</sup> represents alkynyl having 3 to 6 carbon atoms which may be mono- to trisubstituted by identical or different substituents from the group consisting of halogen, cyano, alkoxy having 1 to 4 carbon atoms and cycloalkyl having 3 to 8 carbon atoms, or

20 R<sup>1</sup> represents cycloalkyl having 3 to 8 carbon atoms which may be mono- to trisubstituted by identical or different substituents from the group consisting of halogen and alkyl having 1 to 4 carbon atoms, or

R<sup>1</sup> represents saturated or unsaturated heterocyclyl having 3 to 8 ring members and 1 to 3 heteroatoms, such as nitrogen, oxygen and/or sulfur, where the heterocyclyl may be mono- or disubstituted by halogen, alkyl having 1 to 4 carbon atoms, cyano and/or cycloalkyl having 3 to 8 carbon atoms,

25 R<sup>2</sup> represents an aliphatic saturated or unsaturated group having 1 to 13 carbon atoms and one or more silicon atoms which optionally contains 1 to 3 identical or different heteroatoms from the group consisting of oxygen, sulfur and nitrogen and which is unsubstituted or substituted by 1 to 4 identical or different halogen atoms, or

- R<sup>1</sup> and R<sup>2</sup> together with the nitrogen atom to which they are attached represent a saturated or unsaturated heterocyclic ring having 3 to 8 ring members which contains one or more silicon atoms and/or is substituted by one or more radicals R<sup>2</sup>, where the heterocycle may contain a further nitrogen, oxygen or sulfur atom as ring member  
5 and where the heterocycle may furthermore be substituted up to three times by fluorine, chlorine, bromine, alkyl having 1 to 4 carbon atoms and/or haloalkyl having 1 to 4 carbon atoms and 1 to 9 fluorine and/or chlorine atoms,
- R<sup>3</sup> represents C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, phenyl-C<sub>1</sub>-C<sub>10</sub>-alkyl where R<sup>3</sup> is unsubstituted or partly or fully halogenated and/or optionally carries one to three radicals from the group R<sup>X</sup>, or C<sub>1</sub>-C<sub>10</sub>-10 halogenalkyl which optionally carries one to three radicals from the group R<sup>X</sup>, and R<sup>X</sup> represents cyano, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-haloalkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-halogenalkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-halogenalkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-halogenalkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylamino, di-15 C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkenyloxy, C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-alkynyloxy and optionally halogenated oxy-C<sub>1</sub>-C<sub>4</sub>-alkyl-C<sub>1</sub>-C<sub>4</sub>-alkeneoxy, oxy-C<sub>1</sub>-C<sub>4</sub>-alkenyl-C<sub>1</sub>-C<sub>4</sub>-alkoxy, oxy-C<sub>1</sub>-C<sub>4</sub>-alkyl-C<sub>1</sub>-C<sub>4</sub>-alkyloxy,
- R<sup>3</sup> represents phenyl which may be mono- to tetrasubstituted by identical or different 20 substituents from the group consisting of  
halogen, cyano, nitro, amino, hydroxy, formyl, carboxy, carbamoyl, thiocarbamoyl; in each case straight-chain or branched alkyl, alkoxy, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 6 carbon atoms;
- in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 25 to 6 carbon atoms;
- in each case straight-chain or branched haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulfinyl or haloalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;
- in each case straight-chain or branched haloalkenyl or haloalkenyloxy having in each 30 case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxy carbonyl, alkylsulfonyloxy, hydroximinoalkyl or alkoximinoalkyl having in each case 1 to 6 carbon atoms in the individual alkyl moieties;

cycloalkyl having 3 to 8 carbon atoms;

5                    2,3-attached 1,3-propanediyl, 1,4-butanediyl, methylenedioxy (-O-CH<sub>2</sub>-O-) or 1,2-ethylenedioxy (-O-CH<sub>2</sub>-CH<sub>2</sub>-O-), where these radicals may be mono- or polysubstituted by identical or different substituents from the group consisting of halogen, alkyl having 1 to 4 carbon atoms and haloalkyl having 1 to 4 carbon atoms and 1 to 9 identical or different halogen atoms;

10                 or

R<sup>3</sup>                represents saturated or unsaturated heterocyclyl having 3 to 8 ring members and 1 to 3 heteroatoms from the group consisting of nitrogen, oxygen and sulfur, where the heterocyclyl may be mono- or disubstituted by halogen, alkyl having 1 to 4 carbon atoms, alkoxy having 1 to 4 carbon atoms, alkylthio having 1 to 4 carbon atoms, haloalkoxy having 1 to 4 carbon atoms, haloalkylthio having 1 to 4 carbon atoms, cyano, nitro and/or cycloalkyl having 3 to 6 carbon atoms;

15                 or

R<sup>3</sup>                represents C<sub>1</sub>-C<sub>8</sub>-alkylamino, C<sub>2</sub>-C<sub>8</sub>-alkenylamino, C<sub>2</sub>-C<sub>8</sub>-alkynylamino, di-C<sub>1</sub>-C<sub>8</sub>-alkylamino, di-C<sub>2</sub>-C<sub>8</sub>-alkenylamino, di-C<sub>2</sub>-C<sub>8</sub>-alkynylamino, C<sub>2</sub>-C<sub>8</sub>-alkenyl-(C<sub>2</sub>-C<sub>8</sub>)-alkynylamino, C<sub>2</sub>-C<sub>6</sub>-alkynyl-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino, C<sub>2</sub>-C<sub>8</sub>-alkenyl-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylamino, C<sub>6</sub>-C<sub>10</sub>-aryl-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino, C<sub>6</sub>-C<sub>10</sub>-aryl-(C<sub>1</sub>-C<sub>4</sub>)-alkyl-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino, heterocyclyl-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino or heterocyclyl-(C<sub>1</sub>-C<sub>4</sub>)-alkyl-(C<sub>1</sub>-C<sub>8</sub>)-alkylamino;

20                 R<sup>4</sup>                represents H, halogen, (C<sub>1</sub>-C<sub>4</sub>)-alkyl which is unsubstituted or substituted by one or more halogen atoms, cyclopropyl which is unsubstituted or substituted by one or more halogen atoms, and

25                 X                represents fluorine, chlorine, bromine, CN, (C<sub>1</sub>-C<sub>4</sub>)-alkyl which is unsubstituted or substituted by one or more fluorine or chlorine atoms, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy which is unsubstituted or substituted by one or more fluorine or chlorine atoms or (C<sub>1</sub>-C<sub>4</sub>)-alkylthio which is unsubstituted or substituted by one or more fluorine or chlorine atoms.

3. The triazolopyrimidine of the formula (I) as claimed in claim 1 or 2, where

R<sup>1</sup> represents hydrogen, methyl or ethyl, or

R<sup>2</sup> represents a group of the formula Y<sup>2</sup>-Si(O<sub>m</sub>CH<sub>3</sub>)(O<sub>n</sub>CH<sub>3</sub>)(O<sub>p</sub>Y<sup>3</sup>),

where m, n and p independently of one another represent 0 or 1;

5 Y<sup>2</sup> represents a bond or alkanediyl, alkenediyl or alkynediyl, each of which is straight-chain or branched, has 1 to 6 or 2 to 6 carbon atoms, is optionally interrupted by one or two nonadjacent oxygen atoms and is unsubstituted or substituted by one to three identical or different halogen atoms;

10 Y<sup>3</sup> represents straight-chain or branched alkyl or alkenyl having 1 to 5 or 2 to 5 carbon atoms, optionally interrupted by an oxygen-nitrogen or sulfur atom and unsubstituted or substituted by 1 to 3 identical or different halogen atoms;

R<sup>3</sup> represents (C<sub>1</sub>-C<sub>8</sub>)-alkyl, (C<sub>1</sub>-C<sub>8</sub>)-cycloalkyl or benzyl or

R<sup>3</sup> represents phenyl which may be mono- to trisubstituted by identical or different substituents from the group consisting of

15 fluorine, chlorine, bromine, cyano, nitro, formyl, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, allyl, propargyl, methoxy, ethoxy, n- or i-propoxy, methylthio, ethylthio, n- or i-propylthio, methylsulfinyl, ethylsulfinyl, methylsulfonyl, ethylsulfonyl, allyloxy, propargyloxy, trifluoromethyl, trifluoroethyl, difluoromethoxy, trifluoromethoxy, difluorochloromethoxy, trifluoroethoxy, difluoromethylthio,

20 difluorochloromethylthio, trifluoromethylthio, trifluoromethylsulfinyl, trifluoromethylsulfonyl, trichloroethynloxy, trifluoroethynloxy, chloroallyloxy, iodopropargyloxy, methylamino, ethylamino, n- or i-propylamino, dimethylamino, diethylamino, acetyl, propionyl, acetyloxy, methoxycarbonyl, ethoxycarbonyl, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, ethoximinomethyl, methoximinoethyl, ethoximinoethyl, cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl,

25 2,3-attached 1,3-propanediyl, 1,4-butanediyl, methylenedioxy (-O-CH<sub>2</sub>-O-) or 1,2-ethylenedioxy (-O-CH<sub>2</sub>-CH<sub>2</sub>-O-), where these radicals may be mono- or polysubstituted by identical or different substituents from the group consisting of  
30 fluorine, chlorine, methyl, ethyl, n-propyl, i-propyl and trifluoromethyl.

- 5            R<sup>3</sup>      represents pyridyl which is attached in the 2- or 4-position and may be mono- to tetrasubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and trifluoromethyl, or
- 10          R<sup>3</sup>      represents pyrimidyl which is attached in the 2- or 4-position and may be mono- to trisubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and trifluoromethyl, or
- 15          R<sup>3</sup>      represents thienyl which is attached in the 2- or 3-position and may be mono- to trisubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and trifluoromethyl, or
- 20          R<sup>3</sup>      represents C<sub>1</sub>-C<sub>8</sub>-alkylamino or di-C<sub>1</sub>-C<sub>8</sub>-alkylamino, or
- 25          R<sup>3</sup>      represents thiazolyl which is attached in the 2-, 4- or 5-position and may be mono- to trisubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and trifluoromethyl, or
- R<sup>3</sup>      represents N-piperidinyl, N-tetrazolyl, N-pyrazolyl, N-imidazolyl, N-1,2,4-triazolyl, N-pyrrolyl, or N-morpholinyl, each of which is unsubstituted or mono- or - if possible - polysubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl, methoximinoethyl and trifluoromethyl,
- R<sup>4</sup>      represents H, Cl, F, CH<sub>3</sub>, -CH(CH<sub>3</sub>)<sub>2</sub> or cyclopropyl; and
- X         represents F, Cl, CN, (C<sub>1</sub>-C<sub>4</sub>)-alkyl which is unsubstituted or substituted by one or more fluorine or chlorine atoms, OCH<sub>3</sub> or SCH<sub>3</sub>.

4. The triazolopyrimidine of the formula (I) as claimed in one or more of claims 1 to 3, where

- R<sup>1</sup> represents H;
- R<sup>2</sup> represents SiMe<sub>3</sub>, SiMe<sub>2</sub>Et, SiMe<sub>2</sub>CHMe<sub>2</sub>, SiMe<sub>2</sub>CH<sub>2</sub>CHMe<sub>2</sub>,  
 SiMe<sub>2</sub>CH<sub>2</sub>CMe<sub>3</sub>, SiMe<sub>2</sub>OCHMe<sub>2</sub>, SiMe<sub>2</sub>OCH<sub>2</sub>CHMe<sub>2</sub>, CH<sub>2</sub>SiMe<sub>3</sub>,  
 CH<sub>2</sub>SiMe<sub>2</sub>Et, CH<sub>2</sub>SiMe<sub>2</sub>CHMe<sub>2</sub>, CH<sub>2</sub>SiMe<sub>2</sub>CH<sub>2</sub>CHMe, CH<sub>2</sub>SiMe<sub>2</sub>OMe,  
 CH<sub>2</sub>SiMe<sub>2</sub>OCHMe<sub>2</sub>, CH<sub>2</sub>SiMe<sub>2</sub>OCH<sub>2</sub>CHMe<sub>2</sub>, CHMeSiMe<sub>3</sub>,  
 CHMeSiMe<sub>2</sub>OMe, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>Et, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>CHMe<sub>2</sub>,  
 (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>CMe<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>CH<sub>2</sub>CHMe<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Me,  
 (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>CH<sub>2</sub>CMe<sub>3</sub>, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>OCHMe<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>SiMe<sub>2</sub>OCH<sub>2</sub>CHMe<sub>2</sub>,  
 CHMeCH<sub>2</sub>SiMe<sub>3</sub>, CHMeCH<sub>2</sub>SiMe<sub>2</sub>Et, CHMeCH<sub>2</sub>SiMe<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Me,  
 CHMeCH<sub>2</sub>SiMe<sub>2</sub>CHMe<sub>2</sub>, CHMeCH<sub>2</sub>SiMe<sub>2</sub>CMe<sub>3</sub>,  
 CHMeCH<sub>2</sub>SiMe<sub>2</sub>CH<sub>2</sub>CHMe<sub>2</sub>, CFMeCH<sub>2</sub>SiMe<sub>3</sub>, CHMeCH<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>OMe,  
 CHMeCH<sub>2</sub>SiMe<sub>2</sub>OCHMe<sub>2</sub>, CHMeCH<sub>2</sub>SiMe<sub>2</sub>OCH<sub>2</sub>CHMe<sub>2</sub>, CH<sub>2</sub>CHMeSiMe<sub>3</sub>,  
 CH<sub>2</sub>CHMeSiMe<sub>2</sub>Et, CH<sub>2</sub>CHMeSiMe<sub>2</sub>CHMe<sub>2</sub>, CHMeCHMeSiMe<sub>3</sub>,  
 CMe<sub>2</sub>CH<sub>2</sub>SiMe<sub>3</sub>, (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>3</sub>, (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>Et, (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>CHMe<sub>2</sub>,  
 (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>CH<sub>2</sub>CHMe<sub>2</sub>, (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>OMe, (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>OCHMe<sub>2</sub>,  
 (CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>OCH<sub>2</sub>CHMe<sub>2</sub>, CHMeCH<sub>2</sub>CH<sub>2</sub>SiMe<sub>3</sub>, CHMeCH<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>Et,  
 CHMeCH<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>CHMe<sub>2</sub>, CHMeCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>OMe,  
 CHMeCH<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>OCHMe<sub>2</sub>, CMe=CHSiMe<sub>3</sub>, CH<sub>2</sub>CH<sub>2</sub>SiMe<sub>2</sub>OMe,  
 -C≡C-SiMe<sub>3</sub>, -CH<sub>2</sub>-C≡C-SiMe<sub>3</sub> or -CHMe-C≡C-SiMe<sub>3</sub>;
- R<sup>3</sup> represents (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>3</sub>-6)-alkenyl, (C<sub>3</sub>-C<sub>6</sub>)-alkynyl, (C<sub>3</sub>-C<sub>8</sub>)-cycloalkyl,  
 where R<sup>3</sup> is unsubstituted or substituted by one or more fluorine or chlorine atoms,  
 or
- R<sup>3</sup> represents 2,4- or 2,6-disubstituted phenyl, or represents 2-substituted phenyl or  
 represents 2,4,6-trisubstituted phenyl,
- R<sup>3</sup> represents pyridyl which is attached in the 2- or 4-position and may be mono- to  
 tetrasubstituted by identical or different substituents from the group consisting of  
 fluorine, chlorine, bromine, cyano, methyl, ethyl, methoxy, methylthio,  
 hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl  
 and trifluoromethyl, or
- R<sup>3</sup> represents pyrimidyl which is attached in the 4-position and may be mono- to  
 trisubstituted by identical or different substituents from the group consisting of  
 fluorine, chlorine, bromine, cyano, methyl, ethyl, methoxy, methylthio,

hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl and trifluoromethyl;

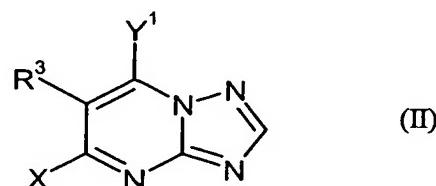
R<sup>4</sup> represents H, -CH<sub>3</sub>, -CH(CH<sub>3</sub>)<sub>2</sub>, Cl or cyclopropyl,

and

X represents fluorine, chlorine, CN, (C<sub>1</sub>-C<sub>3</sub>)-alkyl, in particular CH<sub>3</sub> or (C<sub>1</sub>-C<sub>3</sub>)-haloalkyl, in particular CF<sub>3</sub>, OCH<sub>3</sub>, or SCH<sub>3</sub>.

5. A process for preparing a triazolopyrimidine of the formula (I) as claimed in one or more of claims 1 to 4, where

10 (a) halotriazolopyrimidines of the formula

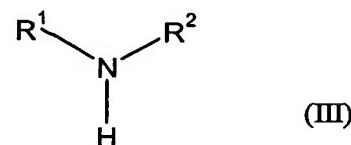


in which

R<sup>3</sup> and X are as defined above and

Y<sup>1</sup> represents halogen,

15 are reacted with amines of the formula



in which

R<sup>1</sup> and R<sup>2</sup> are as defined above,

if appropriate in the presence of a diluent, if appropriate in the presence of an acid acceptor and if appropriate in the presence of a catalyst.

6. A composition for controlling unwanted microorganisms, characterized in that it comprises at least one triazolopyrimidine of the formula (I) as claimed in one or more claims 1 to 4, in addition to extenders and/or surfactants.
7. The composition as claimed in claim 6, which comprises at least one further fungicidally or insecticidally active compound.
8. The use of triazolopyrimidinenes of the formula (I) as claimed in one or more of claims 1 to 4 for controlling unwanted microorganisms.
9. A method for controlling unwanted microorganisms, characterized in that triazolopyrimidines of the formula (I) as claimed in one or more of claims 1 to 4 are applied to the unwanted microorganisms and/or their habitat.
10. A method for preparing compositions for controlling unwanted microorganisms, characterized in that triazolopyrimidines of the formula (I) as claimed in one or more of claims 1 to 4 are mixed with extenders and/or surfactants.